

APA Alberta-based Math Curricula: Grade 6 Math

Whole numbers

- Place values in whole numbers
- Word names for numbers
- Roman numerals

Decimal numbers

- What decimal number is illustrated?
- Decimal place values
- Word names for decimal numbers
- Put decimal numbers in order
- Inequalities with decimals
- Round decimals
- Round whole numbers and decimals: find the missing digit
- Decimal number lines

Integers

- Understanding integers
- Integers on number lines
- Graph integers on number lines
- Compare and order integers

Exponents

- Write multiplication expressions using exponents
- Evaluate exponents
- Exponents: solve for the variable
- Exponents with decimal bases

Money

- Find the number of each type of coin
- Add and subtract money amounts
- Add and subtract money amounts: word problems
- Multiply money by whole numbers
- Multiply money: word problems
- Divide money amounts
- Divide money amounts: word problems

Addition and subtraction

- Add and subtract whole numbers up to millions
- Add and subtract whole numbers: word problems
- Properties of addition
- Estimate sums and differences of whole numbers

- Estimate sums and differences: word problems
- Add and subtract decimal numbers
- Add and subtract decimals: word problems
- Estimate sums and differences of decimals
- Maps with decimal distances

Multiplication

- Multiply whole numbers
- Multiply whole numbers: word problems
- Multiply numbers ending in zeroes
- Multiply numbers ending in zeroes: word problems
- Multiply three or more numbers
- Multiply three or more numbers: word problems
- Estimate products
- Properties of multiplication
- Solve for a variable using properties of multiplication

Division

- Divisibility rules
- Divide by two-digit numbers
- Divide by two-digit numbers: word problems
- Division patterns with zeroes
- Divide numbers ending in zeroes: word problems
- Estimate quotients

Multiply and divide decimals

- Multiply a decimal by a one-digit whole number
- Multiply a decimal by a multi-digit whole number
- Multiply decimals and whole numbers: word problems
- Multiply two decimals using grids
- Multiply decimals
- Estimate products of decimal numbers
- Inequalities with decimal multiplication
- Divide decimals by whole numbers
- Divide decimals by whole numbers: word problems
- Multiply and divide decimals by powers of ten
- Division with decimal quotients
- Inequalities with decimal division
- Simplify expressions involving decimals

Problem solving and estimation

- Estimate to solve word problems
- Word problems with multiple steps or extra or missing information

- Guess-and-check word problems
- Distance/direction to starting point
- Use logical reasoning to find the order

Time

- Elapsed time
- Time units
- Find start and end times
- Convert between 12-hour and 24-hour time

Measurement

- Estimate metric measurements
- Convert and compare metric units
- Metric mixed units
- Convert square and cubic units of length
- Convert between cubic metres and litres
- Working with temperatures above and below zero

Number theory

- Prime or composite
- Identify factors
- Prime factorization
- Prime factorization with exponents
- Greatest common factor
- Least common multiple
- GCF and LCM: word problems

Algebra

- Write variable expressions to represent word problems
- Simplify expressions
- Evaluate variable expressions with whole numbers
- Solve word problems involving two-variable equations
- Evaluate variable expressions involving decimals
- Solve one-step equations with whole numbers
- Solve one-step equations involving decimals
- Evaluate multi-variable expressions
- Complete a function table
- Write linear functions
- Does (x, y) satisfy an equation?
- Identify terms, coefficients and monomials

Coordinate graphs

- Coordinate graphs review
- Graph points on a coordinate plane

- Coordinate graphs as maps
- Relative coordinates

Data and graphs

- Interpret pictographs
- Create pictographs
- Stem-and-leaf plots
- Interpret line plots
- Create line plots
- Create and interpret line plots with fractions
- Create frequency tables
- Interpret bar graphs
- Create bar graphs
- Interpret double bar graphs
- Create double bar graphs
- Create histograms
- Circle graphs with fractions
- Interpret line graphs
- Create line graphs
- Interpret double line graphs
- Create double line graphs
- Choose the best type of graph

Fractions and mixed numbers

- Fractions and mixed numbers review
- Equivalent fractions review
- Simplify fractions
- Understanding fractions: word problems
- Least common denominator
- Compare fractions with like and unlike denominators
- Compare fractions: word problems
- Convert between improper fractions and mixed numbers
- Convert between decimals and fractions or mixed numbers
- Put a mix of decimals, fractions and mixed numbers in order

Rational numbers

- Compare rational numbers
- Put rational numbers in order

Add and subtract fractions

- Add and subtract fractions with like denominators
- Add and subtract fractions with like denominators: word problems
- Inequalities with addition and subtraction of like fractions

- Add and subtract mixed numbers with like denominators
- Add and subtract mixed numbers with like denominators: word problems
- Estimate sums and differences of mixed numbers

Multiply fractions

- Fractions of whole numbers I
- Fractions of whole numbers II
- Fractions of a number: word problems
- Estimate products of fractions and whole numbers

Ratios, proportions and percents

- Write a ratio to describe objects in a picture
- Ratio tables
- Ratios: word problems
- Equivalent ratios
- Compare ratios: word problems
- Proportions
- Unit rates and equivalent rates
- Scale drawings
- What percentage is illustrated?
- Convert between percents, fractions and decimals
- Compare percents to each other and to fractions
- Compare percents and fractions: word problems
- Percents of numbers and money amounts
- Percents of numbers: word problems
- Find what percent one number is of another
- Find what percent one number is of another: word problems

Consumer math

- Sale prices
- Which is the better coupon?
- Unit prices: which is the better buy?
- Unit prices with fractions and decimals
- Percents – calculate tax, tip, mark-up and more
- Simple interest

Mixed operations

- Add, subtract, multiply and divide whole numbers
- Add, subtract, multiply and divide whole numbers: word problems
- Add, subtract, multiply and divide decimals
- Add, subtract, multiply and divide decimals: word problems
- Add, subtract and multiply fractions
- Add, subtract and multiply fractions: word problems

Geometry

- Review of 2- and 3-dimensional figures
- Angle review: measure and classify
- Estimate angle measurements
- Name angles
- Triangle review
- Classify quadrilaterals
- Find missing angles and side lengths in triangles and quadrilaterals
- Sums of angles in polygons
- Parts of a circle
- Similar and congruent figures
- Find side lengths of similar figures
- Reflection, rotation and translation
- Translations: graph the image
- Reflections: graph the image
- Rotations: graph the image
- Symmetry
- Perimeter
- Area of squares and rectangles
- Area of triangles
- Area of parallelograms and trapezoids
- Area of compound figures
- Area between two rectangles
- Area and perimeter of irregular figures
- Area and perimeter: word problems
- Rectangles: relationship between perimeter and area
- Compare area and perimeter of two figures
- Identify polyhedra and count faces, edges and vertices
- Which figure is being described?
- Front, side and top view
- Nets of 3-dimensional figures
- Volume and surface area of cubes and rectangular prisms
- Volume and surface area of triangular prisms

Probability

- Combinations
- Probability of one event
- Make predictions
- Probability of opposite, mutually exclusive and overlapping events
- Compound events – find the number of outcomes by counting

Statistics

- Calculate mean, median, mode and range
- Interpret charts to find mean, median, mode and range
- Mean, median, mode and range: find the missing number
- Identify representative, random and biased samples